

# **PLATINA 2**

# Report on the progress of PLATINA 2 (Platform for the implementation of NAIADES II)

Review of activities September 2013 – July 2014

Preview of planned activities August 2014 – April 2015

Version: 17.09.2014



#### **DISCLAIMER**

PLATINA 2 is funded by the Directorate General on Mobility and Transport of the European Commission under the 7th Framework Programme for Research and Technological Development. The views expressed in the working papers, deliverables and reports are those of the project consortium partners. These views have not been adopted or approved by the Commission and should not be relied upon as a statement of the Commission's or its services' views. The European Commission does not guarantee the accuracy of the data included in the working papers and reports, nor does it accept responsibility for any use made thereof.



### **TABLE OF CONTENTS**

1.Introduction	4
2.Executive summary	6
3.Markets & Awareness	9
3.a. Identification of new markets for inland waterway transport	9
3.b. Logistics and decision support tools	14
3.c. Study on market mechanisms and transparency	18
4.Innovation & Fleet	20
4.a. Tools for innovation take-up	20
4.b. Knowledge base for innovation uptake and internalisation of external costs	22
4.c. Innovation agenda and technology forecast	25
5.Jobs & Skills	29
5.a. Elaboration of technical standards for simulator use	29
5.b. Concept for electronic service record books	30
5.c. Learning material for future logistics decision makers	31
6.Infrastructure	34
6.a. Inland navigation and multimodality	34
6.b. Administrative and technical support for River Information Services	36
6.c. Good practices in inland waterway maintenance	39
7.Technical Secretariat	41
7.a. Communication, dissemination & information services	41
7.b. NAIADES Dialogue	43
8.Annex I: Platina 2 Proposal for Research Topics	45
0 Annoy II: List of Contact Parsons	10



#### 1. INTRODUCTION

PLATINA 2 is a multidisciplinary and pan-European project to promote inland waterway transport. It continues the successful work of its predecessor PLATINA (2008-2012) and supports the European Commission, Member States, third countries, river commissions and the sector in the implementation of the European Action Programme for inland waterway transport (NAIADES II). Its action areas are "Markets & Awareness", Innovation & Fleet", "Jobs & Skills" and "Infrastructure". PLATINA 2 runs from autumn 2013 to spring 2016 and is co-funded by the European Union under the 7th Framework Programme. The project consortium consists of 12 partners from 7 different countries and is led by viadonau, the Austrian waterway management company.

#### **PLATINA 2 Action areas**

PLATINA 2 has a focused approach and concentrates its work on the action areas of NAIADES II.

In the field of **Markets & Awareness**, PLATINA 2 will identify and attract new markets for inland waterway transport and stimulate multimodal supply chain integration as well as synergistic actions between operators. Main outcomes in this action area will include the:

- A European inland waterway market transfer roadmap
- An updated European transport funding database for inland waterway transport
- A European information portal for logistics decision support

In the field of **Innovation & Fleet**, PLATINA 2 will define measures to stimulate innovation take-up and greening of the fleet, enhance the knowledge basis on external cost performance and consolidate research and innovation needs. Main outcomes in this action area will include the:

- Enhanced stakeholder exchange and an improved knowledge basis on external cost of inland waterway transport
- A roadmap for research and innovation deployment in inland waterway transport
- A web tool to foster innovation take-up by the sector

In the field of **Jobs & Skills**, PLATINA 2 facilitates the development of standards for simulators and electronic service record books and raises the impact of inland waterway transport in logistics education and training by improving teaching aids. Main outcomes in this action area will include the:

- A roadmap towards standardisation for ship-handling simulators
- A concept for European electronic service record books
- Consolidated learning material including a dissemination plan

# platina 2

#### PLATFORM FOR THE IMPLEMENTATION OF NAIADES II

In the field of **Infrastructure**, PLATINA 2 provides tools for the integration of inland waterway transport into multimodal European corridors support the implementation of River Information Services and foster knowledge exchange on effective waterway maintenance. Main outcomes in this action area will include the

- Guidance documents for the integration of inland waterway transport into European multimodal corridors
- An improved interactive RIS Community Portal
- A manual for effective inland waterway maintenance

#### Scope of this report

Each report of this kind provides a review of technical results achieved since the last report as well as an outlook on activities and outputs planned for the forthcoming period. The project consortium presents its reports to the Advisory Committee for critical review. This report covers a review of activities between September 2013 and July 2014, and contains a preview of activities between August 2014 and July 2015, with focus on the second half of 2014.



#### 2. EXECUTIVE SUMMARY

Organised along the lines of the European Commission's NAIADES II action programme, four action areas are pursued in the work programme of PLATINA 2, complemented by the activities of the Technical Secretariat. In the first 11 project months, a number of PLATINA 2 activities have been carried out. Please find a summary of all action areas below.

Due to the inclusive approach of PLATINA 2, the authors not only ask for feedback on intermediate steps, but also for guidance on the next steps. Annex II also contains a list of contact persons, which would be glad to receive additional input and/or discuss your involvement

#### **Markets & Awareness**

The aim of the action area is to support the NAIADES II objective on increasing the modal share of inland navigation. It deals with identifying and attracting new markets for inland waterway transport, opening up opportunities in continental cargo markets, stimulating multimodal supply chain integration and encouraging entrepreneurship and stimulation of market transparency. Out of a **comparison of modal shift studies** and cases, carried out first, it became clear that logistic decision makers evaluate the performance of their logistic operators, and thus the possibilities of a modal shift initiative, on a set of economic and quality factors: door to door transport costs and reliability were the most important. Nevertheless an equilibrium between a number of other factors depending on the particular characteristics of the commodities and the markets they serve, regional aspects or even personal convictions, had to be reached. The practical cases proved that in introducing a new logistic concept it is important to invest in awareness: through the creation of awareness internal initiatives can be triggered which means that the modal shift process is conceived as strategic and judged on other merits.

A second task, still in progress is a 'macro analysis of continental market potential' to identify individual transport flows that, brought together, could bring enough volume to operate a liner service between two (or more) Inland Terminals in research off the potential off intermodal continental transport along the IWT network.

Another goal within the action area is to **develop logistic decision support tools**. First the **European funding database** (www.naiades.info/funding) was updated in content and is in continuous operation, **12.139 unique visitors** have accessed the funding database, resulting in **80.506 page views** since 2009.

On inquiring the user aspirations for a **functional concept for an IWT information portal** the results showed that there was no immediate need for new initiatives rather than the further development of existing tools. Through the sharing of content between existing tools and some forms off interoperability between them were sought. A **business concept** proved that those tools can't be operated in an independent commercial model but need to be offered by organisations that have it in their goal to disseminate that kind of information though cooperation with commercial players clearly benefits the value of the content.



After the liberalisation of the inland waterway transport market (end of the tour-de-role system), governmental subsidies were granted to foster synergistic actions among businesses. This has led to various attempts to start trade associations, of which only few succeeded. Within the activities on **market mechanisms and transparency** the essential drivers determining the success of synergistic actions among businesses will be determined.

#### **Innovation & Fleet**

PLATINA 2 provides **tools and advice** to business organisations and public administrations **on how to speed up innovation take-up**.

In the first 11 months, a **web-based Innovation Toolkit** was developed that will be presented to interested stakeholders for obtaining feedback with selected stakeholders in order to optimize and disseminate the tool to its maximum extent.

The knowledge base needed for determining the **external cost** performance of inland waterway transport is under way by specifying required data, reviewing existing data sources and quality and systematically identifying gaps in data and subsequently providing suggestion on how to close the gaps. Additionally existing research results and future research and innovation needs are detected; gathered and consolidated that will contribute to an improved economic, safe and environmental friendly performance of inland waterway transport. Innovation Meetings with selected key experts will be convened in order to define a comprehensive **roadmap, which identifies promising technologies** with innovation potential and singles out a few priority topics for innovation deployment. As a first step, the first necessary research and innovation areas were drafted on basis of the Strategic Research and Innovation Agenda developed within PLATINA.

#### Jobs & Skills

Within the action area "Jobs & Skills", technical standards for the use of ship-handling simulators are elaborated, a concept for Electronic Service Record Books is prepared and the impact of inland waterway transport in logistics education and training is facilitated by improving and disseminating learning material. In the first 11 months, investigations have been undertaken as regards to **technical standards for ship handling simulators** and consultations with key stakeholders prepared. These consultations have been executed during August and September 2014. With respect to the concept of an **European Electronic Service Record Books** a fist estimation of costs has been made and the necessary components of an electronic service record book on European level and the corresponding needs of boatmen and boat-masters have been identified by means of questionnaires and supporting interviews with boatmen and boat-masters. Furthermore, the **learning material database for logistics decision-makers** on www.edinna.eu has been revised and key institutes have been contacted directly in order to identify additional needs and to facilitate the uptake of logistics learning material into their curricula.



#### Infrastructure

The aim of this work package is to stimulate progress in three key fields of inland waterway infrastructure: integration into multimodal European transport corridors, further development of River Information Services and implementation of effective waterway infrastructure maintenance. In the first field, the objective is to support the development of the multimodal TEN-T corridor work plans from an IWT perspective, which has been the focus of the first project year. PLATINA 2 has come up with two extensive Information Packages for the project consortia which are elaborating the TEN-T corridor work plans. These contain practical guidance on which information needs to be considered for the work plans and how it can be retrieved. The support was well received by the addressees and will continue until end 2014. Furthermore, analytical work on available data sources to close the gaps between necessary and available IWT infrastructure data was performed and a first analysis of possible information architectures for this data pool was undertaken. In the field of River Information Services, the European portal www.ris.eu is maintained. In the coming year, ways on how to stimulate the use of River Information Services for logistics will be analyses and possible future European RIS identified. Related to waterway infrastructure maintenance, a pan-European group of experts was established, which will meet for its first workshop in October 2014. The group will steer the development of a "Good practices manual for inland waterway maintenance", which shall provide practical guidance for waterway administrations focusing on a set of key issues. The Terms of Reference as well as provisional discussion topics have been elaborated.

#### **Technical Secretariat**

This work package aims at efficient management of the project activities and reporting towards the European Commission. In order to secure effective communication, a communication strategy was developed serving as a basis for communication on PLATINA 2. The web portal www.naiades.info was restructured and in course of the redesign, social media were integrated. Furthermore, the first PLATINA 2 printed newsletter was issued in February 2014. PLATINA 2 was presented at several occasions (e.g. NAIADES II Implementation Meeting). Policy support related to Jobs & Skills, Greening the fleet, support of NAIADES II Implementation, a newly established Inland Ports Platform and TEN-T Corridor Studies was (or is still) conducted. In order to communicate on PLATINA 2 to a broader circle, two NAIADES dialogue events were held – in conjunction with the EDINNA General Assembly in February 2014 and the Danube Business Talks in March 2014. Further NAIADES Dialogue Meetings are planned in conjunction with Barge to Business (Luxemburg, 20.11.2014) and the CCNR Plenary Session (Strasburg, 4.12.2014).



#### 3. MARKETS & AWARENESS

#### 3.a. Identification of new markets for inland waterway transport

In the last decades, inland navigation has already achieved an important market share in the hinterland transport of maritime containers between the European sea ports and the continent. However, the markets of continental cargo flows and Full Trailer Loads (FTL) are largely captured by road transport and inland navigation is only playing a very modest role in these markets. After analysing potential market segments, segments with the highest potential for shifting towards IWT will be identified. A roadmap, containing recommendations on how to enter the IWT market, and thus shifting from road transport to IWT will be conducted.

#### Task 1.1.1: Comparative analysis of existing modal shift studies

#### **Outline**

This task will review and analyse the results of existing modal shift studies and projects. Lessons learnt, main drivers and barriers behind modal shifts as well as further common issues will be identified in a summary document, which will be the basis for additional investigations in the following tasks. The comparative analysis shall allow the exploitation of exploiting synergies between the so far isolated studies and shall support the identification of promising market segments.

#### Main outputs

Comparison of existing modal shift studies

Deliverable re-submitted on 03.07.2014

# Progress made so far (09/2013 - 07/2014)

The final choice of transport mode and thus the possibility of modal shift depends on different economical or quality-based performance factors and on how the logistic decision makers prioritise these different factors. Concrete modal choices therefore depend to a large extent on: (1) the specific characteristics of the logistics chain involved, (2) the type of freight to be transported and (3) the framework conditions applying in each individual country. It was clearly identified that the main determining factors for modal shift are linked to the costs and the quality of transport: Transport cost (most important factor) and reliability. Success in modal shift is achieved when clear and direct advantages in one of those determining factors is achieved, while withholding the equilibrium between the other performance determining factors.

The total door-to-door transport cost is the most important factor. Several possibilities to reduce costs were identified (e.g. the hub-and-hop system for containerized continental goods).

Several bottlenecks that still prevent the development of modal shift towards IWT were identified. One refers to a fitting and competitive intermodal transport unit. The 45' pallet wide high cube short sea shipping container seems the most appropriate intermodal unit for continental container transport. Attention should also be given to the possibilities to



reduce the handling operations (in cost and time). New transhipment solutions (e.g. the ContainerMover 3000 system or FASTRCARGO used in the rail sector) and spatial planning is here of high importance as there is no direct waterway connection to major production plants/distribution centres. Attention should also be given to the promotion of IWT towards shippers and logistics providers in the IWT. The provision of information on the advantages in costs, but also quality of transport (especially reliability) of IWT for the short, medium and long term will be essential.

The acceptance of the Deliverable is pending.

#### Next steps

# Stakeholders involvement

Validation of the results is done in one of the forthcoming NAIADES Dialogue Meetings and the Regional Meetings (see "Market transfer conditions analysis for promising market segments")

#### Task 1.1.2: Macro analysis of continental market potential

#### **Outline**

The main objective of the 'macro analysis of continental market potential' is to identify individual transport flows that, brought together, could bring enough volume to operate a liner service between two (or more) Inland Terminals. A quantitative macro analysis shall identify potential market segments that are currently not being captured by inland waterway transport at all, namely the continental cargo market, based on an updated freight flow Origin-Destination matrix developed in the European ETISplus project. Estimations will be made which segments of the continental cargo flows could be shifted from road to inland navigation. Where possible, the results will be visualized using geographical maps.

#### Main outputs

Macro analysis of market potential in the FTL continental cargo market

Deliverable re-submitted on 29.08.2014

# Progress made so far (09/2013 - 07/2014)

Panteia has developed a cost model for intermodal transport by barge. In this cost model, costs are calculated for intermodal transport based upon origin and destination of 512 NUTS-3 regions in Europe, including non-interconnected basins such as the Po, Seine and Rhône. Cargo is seen as shiftable if the transport costs by barge are lower than the costs for direct trucking. For this, three scenarios have been developed, based upon the efficiency of the trucking services provided. For each potential liner service by IWT, the amount of cargo that potentially can be shifted in terms of costs has been presented as a percentage of the total amount of cargo that could be attracted. This way, a high potential for modal shift has been identified on the Rhine and Danube corridor. However, volumes are low on the Danube river. Less potential is available for the Mosel river and for



transport in the direction of the Czech Republic via the Elbe river. For river basins that are not interconnected with Europe's main waterway system, there is some potential on the Rhône-Saône river basin for continental container transport. On the Po and Seine, there is hardly any potential.

Results are available for the amount of continental containerized cargo that potentially can be shifted from road to intermodal transport via barge. Following results are available:

- Maps of the outcomes depending on the scenario chosen for road transport efficiency (low, medium, high) containing the potential modal shift from road to intermodal transport by barge;
- Same as above with the addition of name tags per NUTS-3 region (is available upon request);
- Same as above divided by import and export flows;
- Matrix per scenario (low, medium, high);
- Cost information per Origin/Destination (available upon request).

#### **Next steps**

The acceptance of the Deliverable is pending.

# Stakeholders involvement

Validation of the results is done in one of the forthcoming NAIADES Dialogue Meetings and the Regional Meetings (see "Market transfer conditions analysis for promising market segments").

#### Task 1.1.3: Market transfer conditions analysis for promising market segments

#### Outline

Market segments with the highest potential for transport on European inland waterways will be identified and selected for further elaboration based on the micro and macro analyses that are carried out in the previous tasks. Market transfer conditions analyses will be conducted for these promising market segments; involving commercial stakeholders and potentially strategic partners. The conditions will be tested at a small-scale market focusing on particular segments and commodity groups or on particular project regions. This will ensure a practice-oriented definition of the modal shift potential. The activity will raise the visibility of inland navigation by bringing together strategic stakeholders from the private and public sector. The main aim of this activity is to verify the potential for modal shift and to identify both the barriers to be overcome and the opportunities to be seized.



Main outputs	Report on market transfer conditions Planned for 31.3.2015
Progress made so far (09/2013 – 07/2014)	Market segments with high potential for modal shift toward IWT are identified both in the Danube and Rhine corridor.  Based on the results of related projects, an extended and updated market analysis for selected market segments with the highest potential for inland waterway transport is being carried out. This study considers specific requirements of the transported cargo, locations of production and processing sites, the direction of trade flows and existing
	infrastructure conditions. In addition, the market analysis highlights outstanding good practice examples for the use of inland waterway transport and defines sector requirements for a shift towards IWT.
Next steps	As of February 2015 the involved partners will organise regional meetings with stakeholders from the logistics sector to verify the market potential described in the compiled market analysis and to identify potential partners for realising market transfer.
	The organisation of these meetings will depend on the specific market segments, the regions and the actors involved. The aim is to identify, based on the input of the stakeholders, the market conditions necessary to open up these promising market segments for IWT.
Stakeholders involvement	During the regional meetings in the Rhine-Seine Region and in the Danube Region, selected key stakeholders from shippers, logistic service providers, logistic decision makers, pilot partners, shipping companies, terminal operators, and freight forwarders will be invited for discussing the intermediate results of this and related tasks.



Task 1.1.4: Inland w	vaterway market transfer action plan
Outline	Based on the previous tasks it should become clear which opportunities are available on the continental cargo market and which bottlenecks are inhibiting the actors to enter this market at the moment. The results and findings of the previous three tasks will be further analysed and integrated. All findings will be compiled in a series of recommendations. These recommendations will take the form of an inland waterway market transfer action plan, which involves both public and private parties.
Main outputs	Inland waterway market transfer action Planned for 30.9.2015 plan
Progress made so far (09/2013 – 07/2014)	Task not started yet.
Next steps	Starting in February 2015, the analysis of opportunities on the continental cargo market and the development recommendations for identified bottlenecks (modal shift, continental market potential and promising market segments) is planned.
Stakeholders involvement	The results will be validated in one of the future NAIADES Dialogue Meetings.



#### 3.b. Logistics and decision support tools

A European-wide survey by the PLATINA project (2008-2012) demonstrated that inland navigation has a good image amongst potential users of inland waterway transport, but that their knowledge regarding the advantages of inland navigation is rather limited. A lack of knowledge and experience with inland waterways can be a barrier to its actual use. Dedicated logistics decision support tools that answer the questions and requirements of freight forwarders and industrial shippers can help overcome this barrier. Such dedicated tools – that sufficiently and correctly take into account the characteristics of inland navigation – are however not available off the shelf in the current situation.

Task 1.2.1: Operation	n of inland waterway transport funding database
Outline	A European online funding database for inland waterway transport has already been set up during the PLATINA project (2008-2012) via <a href="www.naiades.info/funding">www.naiades.info/funding</a> , and has established itself as a practical support tool for interested parties. The Funding Database for Inland Waterway Transport aims to encourage entrepreneurship among private ship owners as well as small and medium-sized enterprises throughout Europe.
	This task first ensures the continued operation and the update of the existing funding database (www.naiades.info/funding) in four languages: English, French, German and Dutch. Secondly, the use of the database by the target groups will be further stimulated by integrating it in the common portfolio of inland waterway promotion offices across Europe.
Main outputs	Updated funding database for inland continuous operation until the end of waterway transport the project
Progress made so far (09/2013 - 07/2014)	Feedback from the sector on content and usability of the database has been very positive. In the period from its launch on 1 April 2009 to 20 January 2014, 12.139 unique visitors have accessed the funding database, resulting in 80.506 page views.
Next steps	The content will be updated continuously taking into account the notification of new co- funding programmes and the input of the project partners.
Stakeholder Involvement	The operators of the database are in regular contact with the institutions, which manage the funding programs; feedback on the database is always appreciated.



#### Task 1.2.2: Business concept for logistics information portal(s)

#### **Outline**

This task facilitates a reach out to logistics decision makers and aims to design a harmonised approach to collect and provide logistically relevant information for shippers and freight forwarders.

There are already many tools aiming at helping logistics decision-makers in planning their transport activities. None of the already existing tools however reflects the particularities of European inland waterway transport in its parameters completely (e.g. full coverage of maps of the networks, logistics databases, route-planners, etc.). The task therefore starts with a critical analysis of existing decision support tools and calculators, in order to identify both the shortcomings of existing tools and the added value of new efforts in this area.

As next step, the business concept for logistics information portal(s) will be developed, following the corridor approach, i.e. different solutions could apply to each corridor.

#### Main outputs

Business concept(s) of pilot logistics information portal(s)

Deliverable submitted on 07.07.2014

# Progress made so far (09/2013 - 07/2014)

An inventory of existing logistic support tools was made together with a survey of the user needs for logistic decision tools (functional concept). Based on the functional concept, 2 business concepts for 2 corridors (Danube and Seine – Scheldt – Rhine) were developed. These business concepts comprise 3 elements: corridor approach; target groups; financing including continuation after PLATINA 2. Both business concepts are constructed around existing tools. Extensions, integration and information exchange between the existing tools will lead to the creation of 2 (interconnected) portals as today the tools only exist as standalone tools. The business concept was presented to the PLATINA 2 Executive Board; its main conclusion that the amended tools will be operated by project partners also after the end of PLATINA 2 was appreciated.

#### **Next steps**

The acceptance of the Deliverable is pending.

# Stakeholders involvement

Shippers, logistic service providers, pilot partners, shipping companies, non IWT users were contacted during the collection of the user aspirations within the "Functional Concept of logistics information portal(s)".



#### Task 1.2.3: Functional Concept of logistics information portal(s)

#### **Outline**

Shippers as well as transport and logistics service providers (e.g. terminal operators) will be contacted and user requirements for such tools will be obtained by means of structured interviews in the Seine-Scheldt, Rhine as well as in the Danube corridor. It is envisioned to investigate user expectations of approximately 10 experts per TEN-T corridor. This shall lead to a European collection of user requirements, which will serve as basis for the development of the European functional concept.

#### Main outputs

Functional concept(s) of pilot logistics information portal(s)

Deliverable re-submitted on 07.07.2014

# Progress made so far (09/2013 - 07/2014)

An analysis of user expectations (in France, Belgium, the Netherlands, Germany and Austria) – existing IWT users as well as potential IWT users (logistic service providers as well as shippers and cargo owners) – was made as a starting point to define the functional concept: Main conclusions made: different user needs for different user groups (IWT users >< non-IWT users) and in different corridors (water-levels, route description, alternative routes, ...); A common element in the user expectations is that accuracy of information of high importance, as well as easy to access information (a lot of information is already available but is hard to find and scattered at different places).

Logistic Decision support tools Danube region

- Re-Launch of the Danube Blue Pages: improvement of usability and functionalities
- Complete data update for Danubeports.info
- Combination of the two existing portals with the installation of an integrated search offering information on ports and shipping companies
- Optional: extension of the time travel calculator and integration in the portal

Logistic Decision support tools Seine - Scheldt - Rhine region

- ViaWater Route planner: improvement of usability
- Extended information in contact guide
- Combination & integration of available information between the online tools.
- Contact guide information available via ViaWater Route planner
- Inland Waterways Departures List (container) information available via



	ViaWater Route planner
	The Functional concept was presented to the PLATINA 2 Executive Board in Duisburg on 09.07.2014.
Next steps	The acceptance of the Deliverable is pending.
Stakeholders involvement	Shippers, logistic service providers, pilot partners, shipping companies, non IWT users were contacted during the collection of the user expectations within the "Functional Concept of logistics information portal(s)".

Task 1.2.4: Pilot imp	plementation of corridor based logistics information portal(s)
Outline	Following the approval of the Functional and Business Concept for the corridor based logistics information portal(s), the implementation and dissemination to potential users is the next step.
Main outputs	Pilot system of the logistics information Planned for 31.12.2015 portal(s)
Progress made so far (09/2013 – 07/2014)	Task has not started yet.
Next steps	Collecting data and improving and updating the existing tools for both corridors.
Stakeholders involvement	Shippers, logistic service providers, logistic decision makers, pilot partners, shipping companies, terminal operators, freight forwarders, non IWT users were contacted during the collection of the user aspirations within the "Functional Concept of logistics information portal(s)", while the tool will be presented during one of the forthcoming NAIADES Dialogue Meetings.



#### 3.c. Study on market mechanisms and transparency

The share of one-vessel-enterprises exceeds 70% in most countries. The fragmented structure (and the lack of transparency) within the inland waterway transport business are not only a barrier to technological innovations but also to further supply chain integration and market success. The a-typical SME character of the inland navigation sector (small and medium-sized enterprises combined with partly inhibitive investment costs) hampers the necessary continuous innovation process, not only regarding fleet innovations, but also related to market innovations. The many individual companies and the lack of transparency in the sector complicate the identification of business partners that can offer door-to-door solutions and make the sector economically more vulnerable, especially in economic crisis years.

Task 1.3.1: Investig	ate ways to raise market transparency
Outline	After the liberalisation of the inland waterway transport market (end of the tour-de-role system), governmental subsidies were granted to foster synergistic actions among businesses. This has led to various attempts to start trade associations, of which only few succeeded. The essential drivers determining the success of synergistic actions among businesses are unclear as yet.
	This task aims to describe the actual inland waterway market situation in selected EU Member States with a high percentage of inland waterway transport. This includes a comparative analysis on attempts to realise market transparency and establish synergistic actions. The next step will be to identify key success indicators for synergistic actions. Furthermore, an analysis of markets with comparable situations / structures will be initiated to determine possible general success criteria for synergistic actions. This includes agriculture and fishery sector as well as the transport markets maritime transport (deep-sea, short sea), rail transport, road transport. The analysis will assist the European Commission, involved Member States and the sector to support further market transparency, and ultimately, market success.
Main outputs	Strategy to enhance market transparency Planned for 22.9.2014 and synergistic actions
Progress made so far (09/2013 - 07/2014)	Desk research to compare/indicate/select studies describing comparable market structures and trade associations that do or don't perform was undertaken.
Next steps	Involvement of the stakeholders for the validation of the intermediate findings (see below).



#### Stakeholder Involvement

far

07/2014)

**Next steps** 

Stakeholder

Involvement

(09/2013

Interviews/sessions with stakeholders from the inland waterway transport sector, banks, and academics. Validation of findings during NAIADES Dialogue in conjunction with Barge to Business (Luxemburg, November 2014)

In depth analysis structure network inland container terminals and analysis of actors and

The stakeholder involvement will be defined at the start of the activities.

Outline	A special case of the market structure of promising market segments will be monitored in more detail. None of the current market players in the continental transport market have been inclined to set up an inland waterway service with which the market of Full Trailer Loads or continental cargo could be captured. The many actors in the network are all very much focused on the optimization of their own cost structure, business models and the specific services they offer to their clients. An in-depth analysis will be made of the network of inland container terminals, the players and actors involved, the services each of them offer and the commercial and operational relationships between them. Based on this, a possible logistics outline for a Full Container Load multimodal transport chain is developed. This model outline should be capable of logistically interconnecting the origin and destination nodes of the some cargo flows, should elaborate which commercial and operational players should be brought together and should determine their roles in the chain.
Main outputs  Progress made so	Proposal for options for market Planned for 31.07.2015 organisations and structure for continental transport chains  Task not started yet.

Task 1.3.2: Analysis of market organisation and structure for continental logistic chains

business models and services.



#### 4. INNOVATION & FLEET

#### 4.a. Tools for innovation take-up

Due to a variety of reasons, market take-up of innovations proceeds only slowly. Long economic lifetime of fleet investments, low innovation rates, high investment costs combined with low re-investment capacity and a lack of general awareness on available innovations hamper improvements. Consequently, the potential of new technology and innovations is currently not being exploited to the full. This SWP aims at stimulating innovation and its take-up by the sector by providing tailor-made tools for analysing planned projects and implementations.

Task 2.1.1: Toolkit f	or innovation take-up
Outline	The objective is to develop a web-based tool where IWT owners/operators or other users fill-in a specific status quo situation (e.g. type of vessel, operating hours, engine hours, etc.). Subsequently, the user chooses between the different greening technologies (or mix between them) and estimates (1) the average needed investments, (2) the investment's payback period and (3) the impacts on emissions.
	The core of the web-based tool should be based around innovations that are the most feasible, practicable, with the best expected return on investment, and potentially offer the biggest effect on emissions.
Main outputs	Toolkit for innovation take-up Planned for 31.8.2014
Progress made so far (09/2013 – 07/2014)	The implementation step of the innovation toolkit within PLATINA 2 relates to one of the thematic priorities of NAIADES II (greening the fleet). Therefore, the first version includes the technologies LNG, Diesel Particulate Filters (DPF) and Selective Catalytic Reduction (SCR), since they are seen as being the most promising ad elaborate technologies at this point in time.  After the preparation of the functional specification, the tool was designed and implemented. In addition, it was already agreed EICB will manage the open source webtool after the end of PLATINA 2. The innovation toolkit allows owners/operators or other users to fill-in a specific status quo situation (e.g. type of vessel, operating hours, engine hours, etc.). Subsequently, the user chooses between the different greening technologies (or mix between them) and estimates (1) the average needed investments, (2) the investment's payback period and (3) the impacts on emissions.
Next steps	Selected stakeholders will be asked to test the Greening Toolkit in September/October



	2014 and their feedback will be integrated.
	The toolkit will be presented to a larger group of stakeholders for feedback and final amendments will be implemented until end of October 2014.
Stakeholder Involvement	The preparation of the toolkit was done in close cooperation with well-known innovation experts. The toolkit will be presented during the PLATINA 2 Advisory Committee in Brussels on 2.10.2014, and then disseminated at selected additional events.

Task 2.1.2: Organis	ation of industry innovation meetings
Outline	This task will consist of the preparation of the technical programme and the execution of the interactive innovation meetings on how to speed up innovation take-up. a Practically feasible and promising innovations will be presented to an audience of commercial operators and authorities on a regional level, based on the "Greening Toolkit" developed in Task 2.1.1. The feedback of the addressed stakeholders will be considered during the development of the recommendations.
Main outputs	Report on industry innovation meetings Planned for 30.11.2015
Key achievements 09/2013 - 07/2014	The work just started with the identification of first stakeholders.
Next steps	Further potential stakeholders from industry and public administrations will be identified; Information about the toolkit for innovation take up will be communicated to potential users. The programme for innovation meetings will be set up, making use of existing events for maximum exposure (indicative in the first quarter of 2015).  Suggestions for an approach for industry cooperation on greening innovation will be developed, based on the input received during the innovation meetings.
Stakeholder Involvement	Selected stakeholders from industry and public administrations will be addressed during the innovation meetings.



# 4.b. Knowledge base for innovation uptake and internalisation of external costs

Internalisation of external costs is high on the political agenda but hampered by the lack of quality data. Quantification of external costs of inland waterway transport operations is hampered by lack of EU-wide quality data on the operation and characteristics of inland waterway transport (e.g. characteristics of the fleet, average sailing speeds, transport volumes, actual emission levels). The core objective of this activity is to improve the knowledge base for calculations aiming for internalisation of external costs. The main method is desk research on the data sets behind the available calculation models and literature on this subject. By means of a systematic analysis on the used sources and the quality of datasets, the needs and gaps will be identified. Subsequently, the results of the desk research will be presented and discussed with experts in order to validate the findings and to develop the recommendations for the improvement of the knowledge basis.

#### Task 2.2.1: Review of European data sets and identification of gaps

#### **Outline**

The theoretical outline and the indicators used in the Handbook on External Costs of Transport<sup>1</sup> will serve as the framework for the analyses. The objective is to identify for each parameter in the calculation the data requirements to enable reliable calculation of external costs in the IWT sector. This will include information on the sensitivity of indicators on the final result of the calculations as well as possible bandwidth that is seen in practice which gives a view on the sample size and level of differentiation of the parameters. After the description of the requirements, the analyses will describe the existing data that is available. Subsequently the gap will be derived regarding data for external cost calculations in IWT.

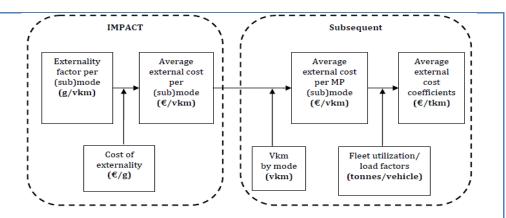
The figure below indicates the General overview of the approach for the calculation of external cost coefficients based on the methodology of the 'Handbook on estimation of external costs in the transport sector' (IMPACT 2008).

<sup>&</sup>lt;sup>1</sup> Sources:

 <sup>(1)</sup> Handbook on estimation of external costs in the transport sector. Produced within the study Internalisation Measures and Policies for All external Cost of Transport (IMPACT), CE Delft, et al, 2008;
 (2) Update of the Handbook on External Costs of Transport, Ricardo-AEA, et al, 2014







Source: JRC (2013).

The activity will focus on the preparation of a specification of required and available datasets at European level. This takes into account the databases used in various studies and calculators in the past, but also the databases that are available but have not yet been applied. The definition of required datasets and review of the existing datasets will only cover those that are needed to determine the externalities of air pollution and climate change.

Based on the review described above, a gap analysis will be carried out by comparing the required versus existing datasets in terms of the quality, degree of precision, reliability, representativeness and quantitative detail. Next recommendations will be made on how to overcome data gaps and deficiencies. This will also be linked to Task 4.1.1 (Information Architecture).

#### Main outputs

Information needs, reviewed datasets and gap analysis for providing the information basis for the determination of external costs performance in inland navigation

Planned for 31.10.2014

# Progress made so far (09/2013 - 07/2014)

A detailed list of parameters for the calculation of external costs was identified based on the Handbook on External Costs of Transport and desk research on calculators and studies such as TREMOVE, ARTEMIS, STREAM, TREMOD prepared by TML, CE Delft, IFEU and PLANCO. Moreover this desk research provided information on the existence of solid data. In this step specific attention was given to the description of indicators that are needed for the calculation steps with qualitative comments and explanations on the sensitivities of these values.

#### **Next steps**

Based on the list of parameters identified, a detailed review will be carried out by STC, DST and WVL on the required versus currently available datasets on European level that can be used for external cost calculations in IWT. In particular, attention will be paid to



the type and quality of sources behind these datasets and the amount of raw data (sample size) that serves as the basis. The focus will be on the available datasets and not on the calculation models.

The results will be presented in a draft report by STC with main findings and key gaps in the datasets for the calculation of external cost in IWT. Subsequently an internal review will be made of the draft report by DST, NEA and WVL. Next, the draft report will be presented and discussed with the experts and stakeholders (synergy with Task 2.2.2). As a final step in task 2.2.1, the final report will be prepared, taking into account the results and feedback by stakeholders and experts.

#### Stakeholder Involvement

Reference is made to the Task "Stakeholder Exchange".

#### Task 2.2.2: Stakeholder exchange

#### **Outline**

The main findings and key gaps in the datasets identified in Task 2.2.1 will be discussed during an Expert Workshop. The stakeholders invited to the workshop will be primarily data collection experts, who will be identified during the review of the datasets (i.e. Task 2.2.1). Other possible stakeholders are experts on external cost calculations. The objective of the workshop is to identify solutions for improving the information basis and to discuss with the relevant stakeholders their implementation. Again, the focus will be on how to improve the quality of the datasets and not on the available models.

The following items will be presented and discussed during the Expert Workshop:

- (1) Presentation and discussion of main findings of Task 2.2.1;
- (2) Discussion on the quality of the datasets and how to improve the information basis;
- (3) Discussion on the roadmap to improve the data.

#### Main outputs

Report on the improvement of the Planned for 01.03.2015 knowledge base for innovation uptake and for external cost calculation in inland navigation

# Progress made so far (09/2013 - 07/2014)

Task has not yet started. However, in the past months the first contacts have been identified and established with authors of reports and studies: CE Delft, CCNR, Ricardo AEA, EICB, EBU, IFEU, INE, GFE, Connekt, TNO, GLEC (follow-up of COFRET project).



Next steps	The following steps are planned for the next months:
	Compile draft list of experts for the workshop:
	- Target group: mainly data collection experts identified during Task 2.2.1
	- Target size: up to 10 external experts
	Contact selected stakeholders for Expert Workshop
	Expert Workshop on how to improve the quality of the information basis.
	<ul> <li>Preparation of a draft report for improving the knowledge basis. The recommendations will be based on the results from the Expert Workshop.</li> </ul>
	Review of the draft report
	Preparation of the final report on the stakeholder exchange on external cost in inland navigation
Stakeholder Involvement	Feedback from stakeholders and experts is collected during the process.

#### 4.c. Innovation agenda and technology forecast

The innovation agenda meets the need for consolidation and coordination of research & development in the field of inland waterway transport. Continuous research and development in shipbuilding (e.g. vessel design, use of materials, hydrodynamics), ship machinery (e.g. engines, fuels, alternative propulsion, ship equipment), innovations in logistics (loading units, transhipment equipment), but also infrastructure maintenance is needed to maintain inland navigation's competitive edge in these fields. The atomised structure and the size of the inland waterway market are however barriers to the establishment of a critical mass for dedicated research & development in the field of inland waterway transport that is triggered by the market. In order to facilitate innovation, PLATINA II therefore aims at the establishment of an inclusive platform on research and innovation for inland waterway transport and the formulation of a research and innovation roadmap for inland waterway transport.

Task 2.3.1 E	stablishment of an inclusive platform on research and innovation for inland waterway transport
Outline	PLATINA 2 will establish a forum of multidisciplinary experts and stakeholders from the
	key industries involved in IWT (Innovation Platform). The purpose of the forum is to bring
	together scientists and industry stakeholders, in order to facilitate an efficient exchange



on medium and long-term research issues and needs and on how to link research and innovation. Thereby the network of experts that has already been established during the PLATINA project (2008-2012) will be complemented with industry stakeholders.

The starting point is the Strategic Research Agenda for Inland Waterway Transport as developed by PLATINA and supported by five branch organisations EBU, ESO, ELA, EFIP and INE, PLATINA 2 will build on this by organizing a process that will facilitate the further prioritization of the issues that have to be dealt with, and that the stakeholders will be ready to commit working on in the fields of infrastructure, greening technology, logistics efficiency and education and qualification. Similar to what the LNG Masterplan does as a vehicle for the introduction of LNG into IWT, the aim is to define a selected list of topics and the appropriate vehicles for furthering their deployment that will allow stakeholders to play their part.

Accordingly, the forum will act as an interface between market demand on the one hand and the need for further and future R&D activities on the other. The forum will

- Identify existing international innovation schemes, relevant research activities and existing innovations related to inland waterway transport (technology forecast)
- review identified research and innovation topics and identify new ones if relevant
- establish a framework for priority setting
- Identify and formulate deployment scenarios for innovation
- Disseminate knowledge on innovations in the field of inland navigation via the PLATINA 2 information services and the NAIADES dialogue

This task is focused on mid-to-long-term research developments and innovation. The first results of the work of the forum will be summarised in a Draft research and innovation roadmap. In addition to telephone conferences and preparatory discussions using new media, the forum will meet at least once a year to adopt a Draft and Final roadmap.

#### Main outputs

Preparation of Innovation platform and draft research and innovation roadmap for inland waterway transport: Identification of relevant stakeholders and of promising innovation topics.

Planned for 31.8.2014

# Progress made so far (09/2013 - 07/2014)

An indicative list of research topics was prepared for the short term horizon, reference is made to Annex I:

Policy-oriented research accompanying NAIADES II



- Advancing ship-borne applications for efficiency of inland navigation
- New logistics concepts including inland waterway vessels and inland ports
- Smart inland waterway maintenance

Also, an indicative list of themes for innovation possibly to be co-financed within the Connecting Europe Facility was prepared:

- · Co-financing for greening the fleet
- European-wide training for energy efficient navigation
- Development and calibration of systems for energy efficient navigation to different vessel types and waterways

In addition, potential stakeholders from the 4 thematic areas were identified.

#### **Next steps**

Stakeholder involvement will be done in the following stages:

- The first stage aims at creating a small group of stakeholders that is committed
  to work with PLATINA II, choosing and formulating a long list of R&I needs and
  priorities they are ready to commit working on and defining proper vehicles for
  their implementation.
- In a second stage, a larger group of stakeholders will discuss the long list and the matching implementation vehicles, decide on a short list of the most eligible issues, commit to working on them and agree on the next steps / further work.
- The European Commission will assist and support the discussions, and will shed light on the possibilities to play a role in committing budget to financing the research and innovation issues that have been identified. Preparatory meetings with stakeholders will take place from October till end of November 2014.
- First meeting (Innovation Platform) envisaged in December 2014.

#### Stakeholder Involvement

Stakeholders are invited to contribute their point of view as regards research and innovation topics and priorities as well as proper vehicles for implementation.

#### Task 2.3.2 Formulation of research and innovation roadmap for inland waterway transport

#### **Outline**

The envisaged roadmap will be a guidance document for the deployment of innovation and future research activities. It shall identify technologies with innovation potential and



	select targeted priority topics for innovation deployment (like e.g. LNG, clean vessel
	technologies or advanced logistical solutions).
	The table of contents of the research and innovation roadmap for inland waterway transport will possibly contain the following chapters:
	necessities and trends
	2. definition of the stakeholders
	3. lessons learnt from other sectors
	4. do's and don'ts
	5. vehicles for innovation deployment
	6. recommendations for deployment in IWT sector
	7. Innovation topics and proposed tools
	In order to have maximum impact, a strong link with the FP7 projects Move-it! and NEWS, the WATERBORNE Technology Platform as well as the Joint European Technology Platform Task Force on Transport Infrastructure Research will be established.
Main outputs	Consolidated Innovation platform and Planned for 31.8.2015 research and innovation roadmap for inland waterway transport
Progress made so far (09/2013 – 07/2014)	Only the preparations for the content of the different chapters of the Roadmap have begun.
Next steps	<ul> <li>Preparation of the research and innovation roadmap considering the results of the inclusive platform as set up within Task 2.3.1.</li> </ul>
	<ul> <li>Identification of technologies with innovation potential and determination of priority topics for innovation deployment.</li> </ul>

# Involvement

Stakeholder

Stakeholders are invited to contribute their point of view as regards research and innovation topics and priorities as well as proper vehicles for implementation.

on and finalise the draft roadmap; scheduled for around spring 2015.

Second meeting of larger group of stakeholders (Innovation platform) to reflect



#### 5. JOBS & SKILLS

#### 5.a. Elaboration of technical standards for simulator use

Ship-handling simulators may be an effective tool for the modernisation and harmonisation of the educational process throughout the European Union, to raise labour mobility and to promote career progression. However, no standards are currently in place governing the use of simulators. The secretariat of the CCNR organised a series of round tables, to be able to discuss the functionalities of ship-handling simulators. This activity will develop a roadmap towards technical ship-handling simulator standards in close cooperation with key stakeholders. The technical standards will focus on two respective domains of education and training:

- Knowledge of Specific Situations based on a definition of the Common Expert Group on Professional Qualifications and Training Standards;
- Ship-handling simulators used for examination purposes.

Task 3.1.1 Developi	ment of the overall framework of ship-handling simulator standards
Outline	Supporting the ongoing EU initiative on the modernisations of the legal framework on professional qualifications, technical standards for simulator use are a next step in the area of simulator use for the educational process.
Main outputs	Roadmap towards standardisation for ship- Planned for 31.12.2015 handling simulators
Progress made so far (09/2013 – 07/2014)	The relevant stakeholders have been identified and a first letter raising the investigation of technical standards has been distributed. Relevant investigations on technical standards for IWT ship handling simulators have been identified and compared. Based on these investigations, interviews with key stakeholders have been developed. The interviews are currently being conducted. Close cooperation with the structures that are expected to play a role in the future standardization at EU level was kept.
Next steps	The interviews will be completed and the technical requirements identified based on the findings. A workshop foreseen for the end of May 2015 will be prepared in close cooperation with the structures that are expected to play a role in the future standardization at EU level was kept. During this workshop the European Commission, Member States Administrations, River Commissions, Social Partners, Education and Training institutes and simulator manufactures will be invited.
Stakeholder	Interviews will be conducted with Member States Administrations as well as simulator



invo	IVΔM	Δnt

manufactures and education and training institutes

Furthermore, a workshop will be organised in May 2015 with the aforementioned stakeholders.

Simulators are on the agenda for the CCNR - MQ/G Working Group for 2015 in order to enable a close interaction with relevant stakeholders.

#### 5.b. Concept for electronic service record books

A concept of a harmonised European standard for electronic service record books (e-SRB) would ease the documentation of service time and qualification of crew members in inland waterway transport and create a level playing field within the European Union. PLATINA 2 prepares a concept for e-SRB's. The functional concept, which should be agreed upon by all key stakeholders, together with the architecture of the system, will lead to technical specifications. Furthermore, the possible integration with other electronic tools will be discussed with key stakeholders and will be part of the investigation on technical possibilities.

#### Task 3.2.1 Concept for electronic service record books

#### **Outline**

Throughout Europe, competent authorities are issuing a broad variety of service record books. The current estimation comes to 500 different types of documents in circulation. Some boatmen carry different service record books, issued in different countries, which hampers effective control. A European electronic service record book (eSRB) should be easily controllable regardless of the language used and allow equal recognition of service time throughout the Member States. It should be securely and duly signed by means of an e-signature and linkable to a possible future register at European level.

#### Main outputs

Concept for European electronic service record books

Planned for 30.4.2015

Progress made so (09/2013

far 07/2014) A first investigation of costs for electronic tools has been executed. A questionnaire with respect to the necessary components of an e-SRB on a European level and the possible combination with an electronic logbook has been distributed to stakeholders, mainly the members of the Common Expert Group on Professional Qualifications and Training Standards. A first set of interviews with boatmen and boat-masters to identify their needs has been conducted in the Netherlands and Romania, which underlined the need from the sector to introduce an e-SRB, in order to create a level playing field. There is a close cooperation with the Joint Research Centre of the European Commission with respect to



	a possible concept of an e-format of a European e-SRB.	
Next steps	Additional interviews with the sailing crew will be conducted in Germany and France. Furthermore, a comparative assessment of a central vs. a decentralised system will be prepared.	
	A workshop in the first quarter of 2015 is foreseen, where the EU Commission, Member States Administrations, River Commissions and Social Partners will be able to share their views on the concept proposed	
Stakeholder involvement	A workshop will be organised with the aforementioned stakeholders. Furthermore, close cooperation with the Join Research Centre during the entire duration of the activities.	

#### 5.c. Learning material for future logistics decision makers

Inland waterway transport is hardly covered in general logistics education and sufficient up-to-date learning materials are lacking. Consequently, future generations of decision makers, freight forwarders and logistics dispatchers lack information of inland navigation and will hardly opt for inland waterway transport if they do not have the proper knowledge on the possibilities of this transport mode.

PLATINA 2 raises the impact of inland waterway transport in logistics education and training by consolidating learning material from existing national and European research projects (e.g. INeS Danube, INeS RMS), by developing a "one-stop-shop" and by disseminating it through the education network EDINNA.

Task 3.3.1 Consolidation of	information services rela	iting to general logistics education

Outline	In order to provide general logistics institutions an easier access to IWT-related learning
	materials, different initiatives have already been taken in the last years. For instance, two
	online learning platforms have been developed under the Marco Polo Common Learning
	Actions: www.inesdanube.info and www.inesrms.info. These materials need a superficial
	revision but first and foremost, their content needs to be consolidated and made ready for
	presentation to potential users, such as pupils, students and trainees. PLATINA 2 will
	take up the consolidation of learning content and in addition develop specific target
	oriented teaching aids in order to promote environmentally friendly waterborne transport
	in logistics education and training. The learning content will be collected, presented and
	published via the www.edinna.eu website.



Main outputs	Consolidation and provision of learning Planned for 30.6.2015 content
Progress made so far (09/2013 – 07/2014)	The current database at the website of EDINNA (www.edinna.eu) has been revised, updated and extended in accordance to new developments and identified needs. The structure of the website has been renewed according to the categories as defined in PLATINA I and other related European projects. It allows easier access to the material, which is available in English, German, French, Romanian, Dutch and other languages, where applicable.
Next steps	Identification of gaps between current information services available and categories as defined in PLATINA I  Development of teaching aids and information services
Stakeholder involvement	European Logistics Association, Inland Navigation Europe, education and training institutes are actively involved in the dissemination of material and the support to facilitate the update of lesson materials into curricula and therefore consulted on the development of additional material

Task 3.3.2 Dissemir	nation plan for logistics learning material	
Outline	PLATINA 2 will support the continuous dissemination of the available learning platforms and learning content. In co-operation with the educational network EDINNA, a website consolidating all relevant material suitable for logistics training institutes will be set up and maintained, in order to facilitate easy access to the material. The information is collected in Dutch, English, French, German, Romanian and other languages to lower the threshold and increase the ease of use. The partners involved will also integrate the dissemination of learning content via their national contacts and distribution channels and develop of a framework for longer term monitoring of the uptake of IWT in logistic education.	
Main outputs	Dissemination plan for logistics learning Deliverable submitted on 31.03.2014 material	
Progress made so far (09/2013 -	A dissemination plan for logistics learning material, including a framework for longer term cooperation between EDINNA, general logistics education and training institutes, training	





#### 6. INFRASTRUCTURE

#### 6.a. Inland navigation and multimodality

The core objective of this activity is to strengthen the position of inland waterway transport in the development process of the multimodal European transport corridor network. In order to do so, PLATINA 2 provides support for the elaboration of the TEN-T corridor work plans from the IWT perspective.

The corridor work plans have been designed as the single tool for steering the implementation of the TEN-T Guidelines. Those define nine multimodal trans-European corridors. For each of them, a work plan shall be established by dedicated consortia until the end of 2014. The work plans shall:

- Analyse and integrate the existing knowledge base (studies, Priority Projects etc.) for each corridor
- Include the necessary stakeholders "Corridor Fora"
- Be open for review and elaboration in 2016/17 and 2019/20
- Contain the following elements:
  - Description of the characteristics of the infrastructure (technical parameters)
  - Analysis of issues and problems on the corridor (use of infrastructure/market study, cross border sections, bottlenecks, interoperability, multimodality and interconnections, Operational and administrative barriers
  - Proposal for objectives
  - o Analysis of on-going, planned and needed projects on the corridor and an implementation plan
  - o Investment plan and funding needs assessment for the measures of the implementation plan

PLATINA 2 has the mission to support (not execute) the integration of IWT into the Core network corridor studies/work plans, by providing information on "why", "what" and "how" to collect data and information on IWT. PLATINA 2 offers this support by proactively providing information packages as well as by verifying their uptake in the work plans and giving suggestions for improvements. Furthermore, the available data on infrastructure vs. the data which would be needed from an ideal perspective is analysed and ways to close the gaps in between are investigated.

Task 4.1.1: Info	rmation architecture for European infrastructure-	related information
Outline		for European infrastructure-related information e European Commission's TENtec system and es.
Main outputs	Information architecture for European	Intermediate Report planned for planned



	infrastructure-related information for 1.10.2014
Progress made so far (09/2013 – 07/2014)	Up to now, a screening of the information needed to carry out Cost Benefit Analyses of IWT infrastructure investments was performed. Further data needs based on additional uses - i.e. monitoring of policy progress and policy target achievement - were specified Concerning available data, the TENtec and ETIS database (both being European tools hosted by the EC) were analysed. The results were integrated into a draft "gap analysis on available and needed IWT infrastructure data, which has been discussed with the EC in order to identify the next steps.
Next steps	Further possible data sources, particularly RIS, national databases and other research projects will be identified and their potential contribution to the targeted information architecture analysed. Technological solutions for linking the databases and elaborating an "IWT-module" for TENtec will be investigated and functional specifications of such a system elaborated. Furthermore, the necessary framing conditions, e.g. the necessary legal basis or existing barriers, will be addressed. Based on this, the possible organisational and financial setup of the information architecture will be elaborated. The draft reports will be discussed with the European Commission and further stakeholders in order to integrate their feedback already during the elaboration process.
Stakeholder involvement	Waterway administrations, port administrations and River Commissions will be asked for feedback during PLATINA 2 Advisory Committee meetings and/or NAIADES Dialogue meetings.

Task 4.1.2: Integration of IWT into TEN-T Corridors	
Outline	The IWT sector needs to be mobilised and provided with practical support in order to secure the proper integration of IWT in the multimodal European transport corridors. To reach this objective, PLATINA 2 supports the elaboration of the multimodal corridor work plans that are currently being prepared based on the TEN-T Regulation from an IWT perspective. In this task, PLATINA 2 provides practical information and tools to the respective consortia.
Main outputs	Guidance on the integration of IWT into  Deliverable submitted on 36.6.2014  multimodal corridors
Progress made so far (09/2013 – 07/2014)	PLATINA 2 provided two information packages on IWT to the consortia preparing the TEN-T corridor work plans, which will be established until end 2014. The packages were distributed during the two Preparatory Meetings of the Corridor Fora in March and May





The first package provided information on the policy context of IWT in multimodal
corridors, physical infrastructure as well as selected points of attention (e.g. multimodality
issues, ports, identification of bottlenecks). It contained a list of stakeholders and sources
as well as a checklist on "issues and problems on the corridor" as well as tools to develop

forecasts for the corridor. Feedback of the consortia was integrated into the final version

of the document.

2014.

The second package provided a framework on how to achieve the objectives for the TEN-T core network from the IWT perspective including a checklist for compliance, focused on corridors with less IWT market share. Furthermore, information for the assessment of the current, expected and additional IWT projects needed was provided. Further dedicated information (e.g. innovation of vessels (greening the fleet), strengthening of cooperation within the sector, further development and improvement on the information systems and exchange between involved parties in the transport chain were addressed.

Further support will be provided in the framework of policy support.

**Next steps** 

For the second half of 2014, PLATINA 2 will shift from providing information to the corridor consortia to verifying the draft corridor work plans for the integration of IWT and the uptake of the PLATINA 2 information packages. If applicable, suggestions for improvement will be given.

Stakeholder involvement

The stakeholder involvement in the work plan development process takes place during the Corridor Fora and is not task of PLATINA 2. The members of the project consortia however are offered the possibility to ask for technical support by PLATINA 2 any time.

#### 6.b. Administrative and technical support for River Information Services

The implementation of RIS improves safety and efficiency in inland waterway traffic as well as multimodal links and logistics operations. Thus, IWT becomes more competitive and attractive to (potential) customers. The core objective of this activity is to enhance this process by identifying future RIS applications and good practices for the logistic use of RIS. Furthermore, expert exchange is fostered by supporting the RIS Expert Groups, which supports innovation and European harmonisation in this field.

Task 4.2.1: Good practices for logistics use of River Information Services



Outline	This task focuses on RIS applications for logistical users (e.g. fleet and terminal operators); As a first step, an overview of the relevant projects will be performed on European level. Subsequently, good practice examples will be selected and evaluated by special assessment criteria. Conditions for their wider uptake will be defined in order to trigger and stimulate the development of new services. Dissemination is an important step as well, e.g. publication of the results on the RIS Community Portal (see task 4.2.1) or presentation during relevant meetings with governmental and logistics stakeholders.	
Main outputs	Good Practices on River Information Planned for 28.2.2015 Services for transport & logistics	
Progress made so far (09/2013 - 07/2014)	<ul> <li>So As the work is based up the study "Evaluation of RIS Implementation for the period 20</li> <li>2011", which is financed by DG MOVE, the work started later than planned. Therefore with the exception of preparatory activities, the work has not yet been started.</li> </ul>	
	The first results indicate, that at the moment, RIS Services for logistics operators focus mainly on the traffic related RIS Services (information on water-levels, etc.), whereas transport-related RIS Services (information for terminal operators, etc.) are hardly used. On the other hand, services, which at least partially disregard the EU data protection legislation and/or are easy to access, are widely used.	
Next steps	Therefore, the requirements of logistics operators will be collected, a gap analysis will be performed and a roadmap for overcoming the barriers to the usage will be drawn up.	
Stakeholder involvement	The involvement of logistics users, preferably via relevant associations is planned. It has not yet been determined, which specific organisations will be involved – to be discussed with Advisory Board.	

Task 4.2.2: Identification of future European RIS Services		
Outline	The first European RIS Services (European Hull Database, European RIS Reference Data Management System were developed within PLATINA. They facilitate the streamlined information exchange among authorities. On the basis of consultations with key stakeholders at the governmental and logistics side and taking into account related projects (e.g. the RIS Policy Analysis, which was initiated by the European Commission), possible additional European RIS Services will be identified.	
Main outputs	Feasibility studies on future European RIS Planned for 31.12.2015	



Progress made so far (09/2013 – 07/2014)	Task has not yet started.
Next steps	This task will start in spring 2015 (due to the delayed finalisation of the RIS policy analysis).
Stakeholder involvement	Key stakeholders at the governmental and logistics side will be consulted in the preparatory work; a NAIADES II Dialogue within the RIS Week in June 2015 will provide additional opportunities for providing inputs.

Task 4.2.3: Operation and enhancement of RIS community portal		
Outline	Within the PLATINA project (2008-2012), the RIS portal (www.ris.eu) has been developed to serve as a single access point to the available websites of the RIS Expert groups and to facilitate the exchange of information between the RIS Committee, RIS Expert groups, the industry and the end-users. The RIS expert groups play an important role in the creation and maturing of RIS standards.  Within PLATINA 2, the operation of the RIS Portal will continue. At the end of the	
	PLATINA 2 project, the operational hand-over to the European Commission (or an organisation defined by the European Commission) is anticipated.	
Main outputs	Implementation of interactive RIS ongoing task  Community Portal	
Progress made so far (09/2013 – 07/2014)	An update of content and structure of the portal was performed in June 2014 based on the feedback of the RIS Community.  Secretarial support to the RIS Expert Groups during the Common Issues Meetings in November 2013 and Berlin 2014 was provided.	
Next steps	Further elaboration of ris.eu based on inputs of the RIS expert group chairpersons and further important user groups.	
Stakeholder involvement	During each of the Common Issues meetings, which are organised with the framework of the bi-annual RIS weeks, presentations on the achievements of PLATINA 2 were held. This tradition will be continued.	



#### 6.c. Good practices in inland waterway maintenance

Effective waterway maintenance is a key factor for the competitiveness of inland waterway transport. Nevertheless, available knowledge on effective and sustainable maintenance in Europe is not exploited to the full. This is caused by the fact that information exchange among waterway authorities has only started at a regional level. However, mutual learning on efficient planning and implementation, stimulated between the river corridors, would lead to improved waterway maintenance on European scale and therefore needs to be fostered. To achieve this, PLATINA 2 establishes a pan-European group of experts and develops guidance documents for the practical implementation of efficient waterway maintenance.

Task 4.3.1: Constitution of a support group for the elaboration of a good practise manual for inland waterway maintenance **Outline** The members of the group will consist of a small number of selected experts from the working level, covering at least three European waterway corridors. The focus will be put on issues closely related to implementation. In addition to the discussions during workshops, desk research will be undertaken by the expert group supported by the PLATINA consortium to identify existing good practices on waterway maintenance at a European level. The group of experts will develop the basis for the elaboration of the Good Practise Manual for Inland Waterway Maintenance (see task 4.3.2). Main outputs Terms of Reference of the "Support Group Deliverable submitted on 31.3.2014 for the elaboration of a good practise manual for inland waterway maintenance" Progress made so The Terms of Reference for the group of experts were developed. They also contain a (09/2013 preliminary list of topics as well as a draft meeting schedule. 07/2014) Key experts (D, F, A, NL, BE, CZ, SR, RO, Sava Commission, Danube Commission) have been identified. Coordination with important stakeholders was performed (e.g. ICPDR, CCNR) **Next steps** Task finished Stakeholder The involvement of experts in the preparation of the draft Terms of Reference including a involvement first selection of topics to be dealt with was done via personal interviews of selected experts. Furthermore, the "Support Group" has the possibility to adapt the ToR.





#### Task 4.3.2: Facilitation of know-how exchange on good practices on inland waterway maintenance

#### Outline

Based on the discussion and exchange in the frame of the Expert Group, a "Good Practice Manual for Inland Waterway Maintenance" will be prepared (D 4.6.), which aims to give practical guidance for the daily work of European Waterway Administrations.

This will document will provide guidance on

- monitoring dredging activities in an optimal way
- how to plan cost-efficient and effective waterway maintenance
- considerations for public procurement of dredging services
- provision of information services to fairway users making use of RIS

Possible performance indicators will be addressed as well.

The manual will be elaborated by the PLATINA 2 consortium under the thematic steering of the group of experts, who will review the draft versions. Meeting minutes, intermediate results and the Manual as such will be actively distributed via www.naiades.info, the PLATINA 2 Advisory Committee and further means, like presentations at conferences etc.

#### Main outputs

Good practices manual for inland waterway maintenance

Planned for 31.10.2015

# (09/2013

07/2014)

**Progress made so** Task has not started yet.

#### **Next steps**

The first "Support Group" workshop will take place in October 2014 in Vienna. Besides the agreement on basics (e.g. Terms of Reference, draft work plan, members), an overview of maintenance activities in the corridors will be presented and a first discussion session on specific topics (e.g. data requirements) will be held. The first draft of the Manual on Good Practices in sustainable Inland Waterway Maintenance will be elaborated by the PLATINA 2 consortium and is planned for March/April 2015.

#### Stakeholder Involvement

The draft versions of the manual, which is elaborated under the steering of the "Support Group", will be discussed with a larger group of stakeholders (in NAIADES dialogue sessions and/or the Advisory Committee and further workshops). The minutes of the "Support Group" workshops will by publicly available (www.naiades.info).



#### 7. TECHNICAL SECRETARIAT

The activities of the Technical Secretariat assure an effective technical co-ordination of actions, sound financial management and dissemination. The Technical Secretariat maintains regular contact with the European Commission as well as the Steering Committee and industry representatives. In addition, this work package includes policy support and the new tool of the NAIADES dialogue.

#### 7.a. Communication, dissemination & information services

# Progress made so www.naiades.info has been redesigned and restructured. The new webpage went online in April 2014. O7/2014) New markets for waterway logistics Identification of new markets for waterway logistics Very markets for





The following **news items** have been issued on the site (as of 21. July 2014):

- Working Time Rules for Inland Waterway Workers, 08 July 2014
- Towards an International Danube Ship Waste Convention, 02 Jun 2014
- TEN-T: Last Marco Polo II Call finances 27 projects, 23 May 2014



- PLATINA 2 on course!, 20 May 2014
- European Inland Waterways Conference, 03 Apr 2014
- Danube Business Talks, 19 Mar 2014
- PLATINA 2 has started, 18 Mar 2014
- New European core network coordinators, 12 Mar 2014
- Barge to Busines and Riverdating, 03 Mar 2014
- Funding Database relaunched!, 18 Feb 2014
- LNG transport regulations adopted, 06 Feb 2014
- EDINNA web-database of common IWT learning materials, 03 Feb 2014
- New Connecting Europe Facility, 20 Jan 2014

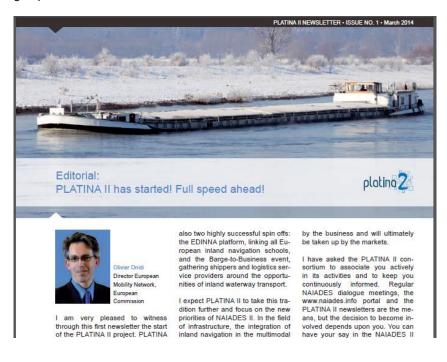
A twitter account (@naiades.info) was established in May 2014.

As of 21.07.2014, 25 tweets have been issued:

```
Maiades Info @naiades_info · 23. Mai

#Platina covers 4 action fields: Market and Awareness, Innovation and
Fleet, Job and Skills, Infrastructure bit.ly/RVn2lv #policy
```

The first PLATINA 2 print newsletter was issued in March 2014 and distributed to a broad group of stakeholders.





On the following occasions, presentations on PLATINA 2 were held:

- Transport Research Arena in April 2014
- Danube Business Talks (March 2014; see NAIADES dialogue)
- EDINNA General Assembly in Brussels in February 2014
- ICPDR Joint Statement Meeting in Zagreb in February 2014
- NAIADES Implementation Group meeting in November 2013
- Smart Rivers Conference in September 2013

#### 7.b. NAIADES Dialogue

NAIADES dialogue reflects the nature of the PLATINA 2 project, namely to serve as an exchange, discussion and promotion platform with practical relevance. It aims to reach out to an external audience of potential end users, freight forwarders, authorities, fleet and terminal operators, potential shippers, different players from the ports sector etc. Through the organisation of dialogue meetings for this external audience on a regional and European level, PLATINA 2 focuses on a participative approach which should facilitate acceptance and ownership for relevant PLATINA 2 results among a wide audience and enable the integration of feedback from practise. Synergies with other conferences are sought.

The NAIADES dialogue shall assure that the development of PLATINA 2 reaches the operators and logistic decision-makers and their representatives. It is both an opportunity for policy makers to communicate their strategies and policy instruments as well as a chance for practitioners to place their point of views and ideas.

#### **NAIADES** dialogue with logistics stakeholders

#### **Outline**

The NAIADES dialogue explicitly aims reaching out to an external audience of potential end users, freight forwarders, authorities, fleet and terminal operators, potential shippers, different players from the ports sector etc. Through the organisation of dialogue meetings for this external audience on a regional and sometimes European level, PLATINA 2 will focus on a participative approach which should facilitate acceptance and ownership for relevant PLATINA 2 results among a wide audience. Possible use of modern social media to further mobilise and inform the external audience will be tested and tried. Synergies with other workshops and seminars will be sought.

Progress made so far (09/2013 -

Two NAIADES dialogues were held in the first reporting period:

In conjunction with the EDINNA General Assembly on 11 February 2014 in

# platina 2

#### PLATFORM FOR THE IMPLEMENTATION OF NAIADES II

#### 07/2014)

#### Brussels:

Main theme: Skilled Workforce and Quality Jobs, target audience: 64 participants (education and training institutes, member states administration, sector representatives)

In conjunction with the Danube Business Talks on 19 March 2014 in Vienna;
 Main theme: New Markets for the Rhine-

Danube Corridor; target audience: 138 participants (mainly shippers, logistics service providers and ports)

A basic framework for further NAIADES dialogue sessions was elaborated, which will be adapted continuously taking into account the findings of the sessions, which have already been convened. Further to the feedback of the European Commission after the first two NAIADES Dialogue Meetings, the approach for the NAIADES II Dialogue Meetings was revisited. Further meetings will place more focus on presenting intermediate achievements of PLATINA 2 and try to group several activities together within one meeting. The combination with already existing events will be continued also in the light of efficient usage of resources.

#### **Next steps**

The following NAIADES dialogue sessions were agreed by the PLATINA 2 Executive Board meeting in Duisburg on 9.7.2014:

- In conjunction with the Barge to Business/Riverdating event on 19-20 November 2014 in Luxembourg; Main theme: innovation, market transparency, target audience: 350 participants (mainly shippers, logistics service providers and ports)
- In conjunction with CCNR Plenary Session on 4.12.2014 in Strasbourg; Main theme: Market mechanism and transparency, Knowledge base for innovation uptake and internalization of external costs, Innovation agenda and technology forecast, Electronic service record books and Inland Waterway maintenance practices; target audience: max. 50 participants (authorities, river commissions and logistics decision-makers)
- In conjunction with RIS Week in 2015 related to RIS Services for logistics operators (indicative)
- In conjunction with event of BDB and/or EBU dealing with fleet and innovation in spring 2015 (indicative)



#### 8. ANNEX I: PLATINA 2 PROPOSAL FOR RESEARCH TOPICS

#### Policy-oriented research accompanying NAIADES II

The task shall facilitate the NAIADES II implementation by carrying out analyses, creating tools and moderating working groups, thus innovating approaches and mobilizing stakeholders related to inland waterway transport in the supply chain and those not yet related to. The task shall address the intervention areas of NAIADES II:

- Quality infrastructure: setting out approaches for the definition of the good navigational status and topical extension of the group of experts on waterway maintenance, etc.
- · Quality through innovation: tools for facilitating innovation in all areas and fostering deployment, etc.
- Smooth functioning of the market: study on promising new market segments for inland waterway transport and new services for inland ports, etc.
- Environmental quality through low emissions: development of a monitoring regime for emissions of the fleet, upgrading of advisory tool for economic sailing, etc.
- Skilled workforce and quality jobs: further activities on simulators and the harmonisation of the education system in close cooperation with the relevant organisational structures in place.
- Integration of inland waterway transport into the multimodal logistics chain: supporting the creation of new business cases, barge to business events in selected corridors, implementation of central European services, etc.

Required contribution: 6 Mil.€ for 4 years

#### Advancing ship-borne applications for efficiency of inland navigation

Mainly due to strong stimuli from authorities, ship-borne River Information Services has been deployed broadly as far as being safety-relevant (Automatic Identification Systems, Electronic Reporting, Notices to Skippers, etc.). Services enhancing the efficiency of inland navigation are lagging behind as these depend on services from authorities and private initiatives. This task shall therefore stimulate the deployment of River Information Services and related applications in the following areas:

- Floating ship data for enhancing/completing the efforts of surveying the river bed and providing the information to the relevant skippers
- River Information Services for transport and logistics operators (port, terminal and fleet operators, freight forwarders, shippers, etc.)
- Advancing the tempomaat and interconnecting it with River Information Services as regards to the
  conditions of the waterways (actual depth, speed of current, etc.) and state of locks, movable
  bridges and ports



 Development of broadly applicable systems for Condition Monitoring<sup>2</sup> collecting information on the machinery condition to detect failures or deterioration, in particular regarding the propulsion system (fuel consumption, torsional moment, emissions of NO<sub>x</sub>, SO<sub>2</sub>,PM<sub>2,5</sub>, etc.), comparing the sensor data with reference values and alerting (if required).

Promoting the integration of RIS data into the TENtec system

Required contribution: 6 Mil.€ for 3 years

#### New logistics concepts including inland waterway vessels and inland ports

On basis of the activities of PLATINA 2 and related projects, during which new market segments are being identified, an analysis of the market potential is performed and market transfer conditions are outlined, further research activities are required to deploy the findings to the market.

Innovative and multimodal solutions including inland waterway vessels and inland ports for dedicated and flexible logistics concepts for hinterland and continental transport have to be developed further, in line with further automation of modular barging and transhipment technology. Dedicated nodes to make the bundling and unbundling of cargo easier have to be developed. Examples could be high performance on-board transhipment tools to load and unload cargo at small areas or adapted loading units/vehicles to directly ship cargo from barges to vehicles or pallet-based concepts. The identified case studies shall be further analysed with regard to their specific characteristics and requirements and its European wide applicability identified.

The focus has to be laid on market potential, technical approaches and requirements, administrative barriers, safety aspects, cost structures and competitiveness compared to existing modes and solutions. Based on these steps, demonstration activities for hinterland and continental transport shall be prepared. Selected example(s) should be demonstrated on small scale, focusing on particular segments and commodity groups, but its broad applicability will need to be outlined.

New education measures for exploiting the results at a broad European level, but also for facilitating cooperation (serious gaming, business training, etc.) shall be tested at relevant corridors in order to maximize the impact on the market.

Required contribution: 9 Mil.€ for 4 years

#### **Smart inland waterway maintenance**

High-quality waterway infrastructure is the main precondition for competitive inland waterway transport. The performance of waterway infrastructure is determined by parameters like depth and width of the fairway, dimensions of locks, ship-lifts and berths and other elements, whereas the weakest stretch defines the conditions

<sup>&</sup>lt;sup>2</sup> Source: Rules for Classification and Construction I Ship Technology, Germanischer Llyod



for the whole transport relation. To further the good navigational status of waterways as demanded by the TEN-T Regulation, specific research activities as well as transnational cooperation efforts are needed.

The main priority is the elaboration and implementation of an integrated waterway management cycle consisting of surveying, planning and implementing maintenance measures and informing waterway users. Along this cycle, further research and proof of concept is needed in various fields, such as

- the interface between maintenance and structural interventions,
- ageing infrastructure,
- adaptions to climate change,
- requirements of different river sections and materials
- · innovative dredging techniques,

Furthermore, there is the need to elaborate and test methods and technologies, such as

- · data collection technologies,
- water level models,
- methods for long term analysis and assessment of measures,
- systems for IT-based integrated waterway management
- effective and user-oriented information transmission,

In general, activities supporting the implementation of pro-active interventions have to be fostered, as these reduce cost as well as environmental damage. Special attention needs to be given to transnational exchange and the implementation of harmonised approaches.

Required contribution: 6 Mil.€ for 4 years



#### 9. ANNEX II: LIST OF CONTACT PERSONS

Topic	Contact Person
Project Coordinator	Andreas Bäck , viadonau – Österreichische Wasserstraßen-Gesellschaft mbH  Andreas.baeck@viadonau.org
Markets	Annick Javor, Promotie Binnenvaart Vlaanderen VZW  Annickjavor@binnenvaart.be
Identification of new markets for inland waterway transport	Paul Lambrechts, Promotie Binnenvaart Vlaanderen VZW  Paullambrechts @binnenvaart.be
Logistics and decision support tools	Annick Javor, Promotie Binnenvaart Vlaanderen VZW  Annickjavor@binnenvaart.be
Study on market mechanisms and transparency	Henk-Erik Sierink, Dutch Ministry of Infrastructure and the Environment  Henk-Erik.Sierink@minienm.nl



Topic	Contact Person
Innovation & Fleet	Henk-Erik Sierink, Dutch Ministry of Infrastructure and the Environment
	Henk-Erik.Sierink@minienm.nl
Tools for innovation uptake	Henk-Erik Sierink, Dutch Ministry of Infrastructure and the Environment
	Henk-Erik.Sierink@minienm.nl
Knowledge base for innovation uptake and internalisation of external	Martin Quispel, STC-NESTRA
costs	Quispel@stc-nestra.nl
Innovation agenda and technology forecast	Berthold Holtmann, Development Centre for Ship Technology and
	Transport Systems
	Holtmann@dst-org.de
Jobs &Skills	Jaap Gebraad, STC – Group
	Gebraad@stc-r.nl
Elaboration of technical standards for simulator use	Werner Kühlkamp, Development Centre for Ship Technology and
	Transport Systems
	Kuehlkamp@dst-org.de



Topic	Contact Person
Concept for electronic service record books	Arjen Mintjes, Maritime Academy Haarlingen
	A.mintjes@maritiemeacademieharlingen.nl
Learning material for future logistics decision makers	Jaap Gebraad, STC – Group
	Gebraad@stc-r.nl
Infrastructure	Gudrun Maierbrugger, viadonau – Österreichische Wasserstraßen-
	Gesellschaft mbH
	Gudrun.maierbrugger@viadonau.org
Inland navigation and multimodality	Gudrun Maierbrugger, viadonau – Österreichische Wasserstraßen-
	Gesellschaft mbH
	Gudrun.maierbrugger@viadonau.org
Administrative and technical support for River Information Services	Andreas Bäck , viadonau – Österreichische Wasserstraßen-Gesellschaft mbH
	Andreas.baeck@viadonau.org
Good practices in inland waterway maintenance	Gudrun Maierbrugger, viadonau – Österreichische Wasserstraßen-



Topic	Contact Person
	Gesellschaft mbH
	Gudrun.maierbrugger@viadonau.org
Technical Secretariat	Andreas Bäck , viadonau – Österreichische Wasserstraßen-Gesellschaft
	mbH
	Andreas.baeck@viadonau.org
Communication, dissemination & information services	Caroline van der Leur, Inland Navigation Europe
	Cvdl@inlandnavigation.eu
NAIADES dialogue	Andreas Bäck , viadonau – Österreichische Wasserstraßen-Gesellschaft
	mbH
	Andreas.baeck@viadonau.org